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7

The problems of rural education

V. L. Griffiths

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V. L. Griffiths

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Fundamentals of educational planning

The booklets in this series are written primarily for two groups: those engaged in—or preparing for—educational planning and administration, especially in developing countries; and others, less specialized, such as senior government officials and civic leaders, who seek a more general understanding of educational planning and of how it can be of help to over-all national development. They are devised to be of use either for self study or in formal training programmes.

The modern conception of educational planning has attracted specialists from many disciplines. Each of them tends to see planning rather differently. The purpose of some of the booklets is to help these people explain their particular points of view to one another and to the younger men and women who are being trained to replace them some day. But behind this diversity there is a new and growing unity. Specialists and administrators in developing countries are coming to accept certain basic principles and practices that owe something to the separate disciplines but are yet a unique contribution to knowledge by a body of pioneers who have had to attack together educational problems more urgent and difficult than any the world had ever known. So other booklets in the series represent this common experience, and provide in short compass some of the best available ideas and experience concerning selected aspects of educational planning.

Since readers will vary so widely in their backgrounds, the authors have been given the difficult task of introducing their subjects from the beginning, explaining technical terms that may be commonplace to some but a mystery to others, and yet adhering to scholarly standards and never writing down to their readers, who, except in some particular speciality, are in no sense unsophisticated. This approach

has the advantage that it makes the booklets readily intelligible to the general reader.

Although the series, under the general editorship of C.E. Beeby, has been planned on a definite pattern, no attempt has been made to avoid differences, or even contradictions, in the views expressed by the authors. It would be premature, in the Institute's view, to lay down a neat and tidy official doctrine in this new and rapidly evolving field of knowledge and practice. Thus, while the views are the responsibility of the authors, and may not always be shared by Unesco or the Institute, they are believed to warrant attention in the international market-place of ideas. In short, this seems the appropriate moment to make visible a cross-section of the opinions of authorities whose combined experience covers many disciplines and a high proportion of the countries of the world.

Foreword

The literature on educational planning contains few contributions from teachers in school systems, those who, in the words of the *Economist*, are 'more planned against than planning'. It is hoped, later in the series, to have one or two booklets from this silent group. In the meantime, V.L. Griffiths can speak for them, though his experience has ranged far beyond the classroom. He has been employed on a number of educational surveys for foundations, governments, Unesco and the United Nations, including missions to East Africa, Nigeria, the Middle East and South-east Asia, and spent a year in the Caribbean studying educational problems in the area for the University College (now the University) of the West Indies. He is now a senior lecturer and tutor in Oxford University Department of Education and a Research Fellow of Keble College, Oxford, and is the author of a book in the New Africa Library series, *Educational Planning*.

In spite of all these claims to be considered an 'expert', V. L. Griffiths has remained stubbornly a teacher, seeing planning always from the point of view of the men and women who have to carry out the job when the computer has no more to say and the planner and the administrator stop short at the classroom door. Most of his working life has been spent in schools or very close to them. At one time he taught in India, but he is best known for his work as Principal of Bakt er Ruda, the Institute of Education in the Sudan. For many years he used that strategic position to bring about a reform of curricula and teaching methods that began in the neighbouring schools and spread outward until now, I am told—but not by him—the work he then did has come to exercise a continuing influence over the schools of the whole country. He wrote an account of this experience in *An Experi-*

ment in Education, a book now, regrettably, out of print. It is all too rare to find a description of a long-term effort to change classroom practice in a developing country.

The ideas behind the Bakt er Ruda experiment, enriched by later experience, come out in this booklet. Not everyone will agree with all the conclusions. There is no problem in educational planning more intractable than the education of the rural child, and few on which authorities will differ so markedly. Some people will consider the author's views on agricultural education, for example, unduly pessimistic, or may challenge the prevailing impression one gets from this essay that major reforms in teaching and learning must be thought of in terms of decades rather than years. I am certain that Griffiths will be delighted if reformers of the future, with their armoury of modern methods and media and a new concentration on the education of adults, prove him to have been too pessimistic. Till then, a man who has proved his passion for educational reform by spending half a working lifetime trying to change education in one developing country, and who has later tested out his conclusions in others, must be listened to with respect by all who are engaged, whether in ministries of education or in the field, in the planning of rural education.

C. E. BEEBY
General editor of series

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I should like to acknowledge my debt to the late G.H. Bacon, and also to G.B. Masefield and Guy Hunter for clarifying my ideas about the educational needs of rural life, to G.N. Herington for the distillation of his long experience of rural education in Nigeria, and to C. E. Beeby not only for help over this booklet but also for the light he has shed on the problem of quality in learning.

Finally, I am grateful to the Agricultural Development Council, Inc., for permission to use some material originally prepared for them and published as Reading 46, 'General Educational Needs for Agricultural Development', in *Selected Readings on Agricultural Development*, New York, 1966.

V. L. GRIFFITHS

Introduction

This booklet is concerned with rural schools that give a general education and with the question whether they have a useful part to play in rural development. I hold the view, based on my own experience—and I have seen no evidence to the contrary—that in backward rural areas the schools cannot be made a main instrument of progress. I argue this in chapter 1 of the booklet, show why the commonly suggested solutions must be rejected, and arrive at the conclusion that only when economic development is already taking place can the schools be expected to play any part—and then only a subsidiary, though quite important, part. In chapter 2, I take a new look at what such an economically developing area might demand from its young, and in chapter 3 suggest some of the key requirements if teaching in the schools is to be effective.

It is alternately infuriating and boring to find that slick and easy solutions to the problem of rural development are still being proposed after years of experience dating back at least to the days of Doctor Johnson[1]. Perhaps one explanation is that very little has been written on the subject. People do not like writing up their failures. This paper

1. Boswell relates a conversation that took place in 1772: 'Mr. Langton told us he was about to establish a school upon his estate, but it had been suggested to him, that it might have a tendency to make the people less industrious. JOHNSON. 'No, Sir. While learning to read and write is a distinction, the few who have that distinction may be the less inclined to work; but when every body learns to read and write, it is no longer a distinction. A man who has a laced waistcoat is too fine a man to work; but if every body had laced waistcoats, we should have people working in laced waistcoats...' Johnson goes on to point out that 'manufacturers' (artificers) can all read and write, and yet none is more industrious than they are. (Boswell, James. *Life of Johnson*, edited by G. B. Hill. London, Oxford University Press, 1887, vol. II, p. 188)

is therefore based largely on my own twenty-one years of experience in the Sudan and on observation during visits to East and West Africa, the Middle East, and the West Indies—most of it, admittedly, in countries with a British tradition in their modern education—and on a limited number of published references to the problem.

1 Common solutions analysed

The rural background

Underlying all the differences between the less developed rural areas of the world, there are certain almost universal features. At least, they are sufficiently common to make it advisable to check whether or not they are present in the particular rural area for which one is planning.

First, there are some obvious features which reveal themselves to anyone taking a walk through a village or the countryside. There is its poverty; this is unlikely to be the abject poverty of the cities, but the general level of wealth is nevertheless likely to be very low. There will be few, if any, substantial houses. Furnishings in the houses or huts will be of the simplest. People will have certain traditional forms of helping each other (for example, during harvest or when house-building) and perhaps of helping the very poor or crippled; but most of the population are so near the subsistence level that appeals to non-traditional altruism, such as voluntary service in youth clubs or adult literacy classes, may make little impression.

Accompanying the low standard of personal living there is a low standard of public services as compared with those provided in the towns. Water will probably be from wells or springs; light from kerosene lamps, as long as the kerosene lasts; fuel will be charcoal, wood, kerosene, or dung. There will be no hospital or doctor, though there may be a dispensary; the shops will stock only the simplest requirements. There will be no regular amusements such as cinemas, but transistor radios may well be making a triumphant entry. Books and newspapers will be very few, because the majority of men and most

women will be illiterate. There may or may not be a primary school, and it may or may not give a complete primary course. It is no wonder that those who have come to appreciate the hospitals and schools, the tap-water and electric light, the range of shops and the bustle of the more modern towns, prefer to move, if they can, to a town, even though living in a town costs them more.

The village school stands out imposingly in contrast to the huts and small houses, but closer inspection reveals that it, too, is of the simplest construction, often just a row of oblong rooms filled with benches and blackboards. There is little apparatus; the walls are nearly bare and books are few. Often there are difficulties in looking after apparatus and books, even when they can be afforded. The school building may lack doors and windows, and so the wind and the goats enter unimpeded. White ants may quickly destroy anything that is not specially protected. The roof can leak and tropical rain drive in. The classes for the youngest children are often overcrowded, and sometimes the children are so crammed together that it is impossible for the teacher to get round to see the work of those in the centre. But higher up the school the classes get smaller and smaller. The bigger children are wanted to help at home or in the field, or they may have got bored and left school, or their parents, especially those with increasing families, may no longer be able to afford the fees.

The teachers will usually have had some years of secondary education, in many cases up to school certificate level. Some will, in addition, have had two years at a teacher-training college, but many will be untrained, especially in those areas where there has been a rapid expansion of education. They will not be the intellectual cream of their generation, because there are so many more attractive careers than teaching. Moreover, their general background and sophistication will be very limited. Nearly everywhere they suffer from a sense of grievance. One reason for this is that their rates of pay are usually not so favourable as those of many others who have received the same amount of education. Another reason in many countries is that their prestige, which once was high in rural areas when they were the only educated persons, has inevitably slumped with the spread of education.

This picture of rural limitations is here and there relieved by the presence of an exceptional individual, such as a devoted headmaster or a strong progressive personality amongst the members of a leading family. Traditional social attitudes and the impact of improved agri-

cultural production and marketing can drastically modify one or more of these features of rural life. Nevertheless, for vast areas of the developing countries these are the hard conditions which have to be faced. They are conditions which quickly become obvious to any foreign observer, even on a quite brief acquaintance with rural life.

Less obvious features

There are two less obvious features of traditional rural life which it would be unwise to overlook if one wishes to change that life. These are the existence of a social ceiling to individual ambition, and the traditional attitude to authority.

In any small, traditional, and close-knit society, where everyone knows about everyone else, the influence of economic incentives on the behaviour of the individual is limited. The individual cannot opt out of his group as he can in an urban environment. He must keep within what is socially acceptable. Most societies set a limit to the activity, the innovations, and the wealth which it is considered proper for a member to display. Society is quick to think up disparaging reasons for the action of an individual who oversteps the mark—he is currying favour with the authorities, he is queer in the head, and so on.

Secondly, long experience has taught many village communities that the best way to deal with outside authority, in the person of officials and the like, is not to argue but to acquiesce—and then do nothing. With any luck the official will soon be transferred elsewhere. If the worst comes to the worst, one can feign stupidity. The official will readily believe that the villagers have not understood. The villagers 'know' that the really stupid people are the officials. For one thing, few officials understand that village life, unlike government, is not departmentalized. Try to change one small bit of it and, as like as not, you find yourself affecting the relationships of husband and wife, children's attitudes to their parents, customary mutual assistance, and perhaps much else besides.

The moral of this is that one approaches rural problems with caution, aware the whole time that rural people will not necessarily want what we think *we* should want in their position; aware, also, that what appears to be agreement, even enthusiasm, on their part may be no more than an habitual protective reaction to the demands of authority.

Commonly suggested solutions

Deep disappointment at the slowness of rural progress and at the failure of so many schemes of agricultural development sometimes tempts planners to clutch at any apparently bright idea in a field that is not their own. One such apparently bright and sensible idea is to make a fresh start with the young. Why not a new kind of education specially devised for rural areas? The proposal usually comes from writers on social affairs, economists, and politicians, who, though in general knowledgeable about rural affairs, are not in sympathetic touch with rural attitudes. They propose that rural schools should have a special curriculum based on the needs of rural life and taught by a specially trained cadre of rural teachers. In one recent proposal by an eminent economist the pupils were to delay their education until adolescence, when, he says, they are at the most absorptive period of their lives and can contribute positively to the work of model school farms. In the conditions obtaining in most of the developing countries such proposals are at present quite definitely non-starters. The reason is not that they ignore the needs of the rural areas, but that they ignore what parents *want* from the schools. No government can afford to ignore this.

Historic aims of going to school

Whatever may be the official aims of education and the hopes of educators, the fact is that most parents look on the schools as a means of escape for their children from the hardships and privations of rural life. To establish special schools for rural children, where the curriculum deliberately attempts to keep them on the land, is to thwart their hopes and ambitions for their children and for their own old age. A recent survey in one of the more advanced of the developing rural countries showed that very few parents wished their children to become farmers. Experience would seem to show that in most areas special schools for rural children would be completely unacceptable.

This is understandable if one thinks of the origin of the modern school. It did not originate in any attempt by rural communities to improve their own way of life. It was introduced by foreigners, religious bodies, or colonial governments, and its first economic effect was to siphon off a few of the brightest children into clerical and other

white-collar employment. The tradition persists, and is unlikely to change until farming can show greater financial returns, stability, and ease than the white-collar jobs.

It is unnecessary to say more about the proposal for a separate system of rural education, because it is, in fact, rarely taken seriously by a government.

The best of both worlds

The argument for a less extreme group of suggestions runs like this. It is accepted that rural schools must follow very much the same syllabuses as town schools and that there must be, and must be seen to be, an equal chance for rural boys and girls to move up the educational ladder according to their ability, but rural science, rural studies, practical agriculture or gardening should be taught as alternatives to some of the regular items in the syllabus. In this way, those who did not succeed in getting white-collar jobs would at least be partially prepared to take part in the improvement of rural life, and they could continue their agricultural training in special vocational schools. In other words, the schools should have a double aim: education leading to salaried white-collar or technical employment, and education leading to unsalaried farming and an enlightened attitude to rural improvement. Parents, it is argued, would see the advantage of having the best of both worlds. This seems so reasonable that numerous attempts have been made to implement such a policy.

Rural teacher-training colleges have been set up in a number of countries to train semi-specialist teachers; agricultural officers have co-operated in devising syllabuses and have sometimes been seconded to the education service to help supervise the programme; school gardens have been given widespread encouragement and school farms started where conditions appeared suitable. Science syllabuses have been devised which based much of the syllabus on rural material, and agriculture has been accepted as an examinable subject in school-leaving examinations.

But all this with what results? One country which had enthusiastically taken up agriculture as part of its rural primary and middle school programme has completely abandoned it after a trial of about a decade. In another, no more than 2 per cent of school-leavers in a group of rural schools, teaching rural science, were found to go back

voluntarily to farming. In another, a very large and populous country, eight years after the introduction of agriculture as an examinable subject in the school certificate examination only eleven candidates entered for the paper. In another, the distinct curriculum of rural teachers-training colleges has been abandoned. One could go on.

Reasons for failure

What are the reasons for the widespread failure of a policy which seems so reasonable? The natural reaction is to blame the teaching in the schools, the methods used, and the public-spiritedness of the teachers. There may be some truth in this, but for the failure to be so widespread and to have continued over such a long period of time, indeed since the last century, the causes must be stubborn ones. To understand what they are one needs to appreciate the pressures on the teacher and certain practical difficulties.

First, teachers are unlikely to have the support of parents in this part of the curriculum. Parents cannot believe that rural studies or activities can be given equal weight in the examination with the traditional literary studies. (Incidentally, they rarely have much faith in the practical knowledge of a teacher about agricultural matters.) The easiest way to get one's pupils through an examination is to cram them with the facts and let them learn off model answers. Many teachers do not want to do this and know in their hearts that it is bad education, but what can they do when their reputation so often depends on the examination results of their school? The value of experiment and practical activities in developing a pupil's powers of thinking and his personality is not something the public usually appreciates. Parents want their children above all to get qualifications. This is the main obstacle to the success of any rural features in schools.

Even if this first obstacle can be overcome, there are others which particularly affect practical activities. A school garden needs to be quite a large one if pupils are to take a personal interest and do regular manual work in it. Very often the plot available is small, and the pupils work in it occasionally and as a labour gang—which makes them hate gardening. Holidays can occur at times when it is disastrous to leave a garden untended. Teachers may be subject to transfer too frequently, and this can play havoc with the efficiency of continuous practical projects such as a farm or garden. The youth and lack

of fundamental scientific knowledge of the pupils can seriously limit what they are capable of doing. Indeed, so discouraging have been the efforts at agriculture and gardening in any but vocational schools that expert agricultural opinion has very largely swung against their being taught at the primary stage and is even uneasy about the secondary stage.

Mr. W. S. van de Wal, reporting for FAO on agricultural education and training in one African country, commented, 'Experience has shown that the youth of the students plus inadequate basic education as well as instruction by teachers with little or no knowledge of modern agriculture doom this practice [of including agricultural training in early education] to failure.' He goes on to say that, even beyond standard VIII, it is questionable whether agriculture as a programme of study should be offered in the general schools, and advocates special schools for those not going on to college or university, preferably after some experience of farming.[1]

What about the exceptions?

If these constant and widespread attempts to introduce an effective second aim into rural schools have failed, how is it that, nevertheless, there are scattered about the world schools with a reputation for successfully combining rural interests with academic education, usually at the post-primary level?

It is quite true that there are individual schools which have all the appearance of success, but the kind of success they are achieving needs to be looked at more closely. First, there are some whose popularity comes from the offer of a second chance to acquire a general qualification rather than from the rural content of the curriculum. Secondly, there are excellent schools with dedicated staffs and with students who during their time in school throw themselves wholeheartedly into rural studies and spend long hours on their agricultural plots. But after they leave school very few go back to farming; almost all take up salaried, usually white-collar, jobs. One cannot say that their education is wasted. No one will argue that a boy has wasted his time at school learning arithmetic or playing football even if, after leaving school, he fails to become an accountant or a professional

1. Van de Wal, W. S. 'Report on Agricultural Education and Training in Tanganyika'. FAO contribution to Unesco Planning Mission, 1962.

footballer. But schools with a rural bias often do intend that a large proportion of their students should take to farming. That they do not become farmers may be due to lack of opportunities or to public opinion which sets them other goals.

The difficulty of transfer

One of the schoolmaster's problems, not always recognized by reformers, is how to ensure the transfer to after-school life of ideas and habits learnt in school. Children in school are easily influenced by teachers they admire; once they have left school they come under the powerful influence of adults just older than themselves. Few are prepared to stand out against public opinion, particularly in rural society. Return to the land would seem to be confined to those schools or courses where each pupil either is already a farmer or has the promise of a substantial holding, such as is given, for example, by training courses for prospective tenants on a cotton scheme.

The conclusion, then, is that where the public image of farming is that of a poor, old-fashioned, and brutish way of life, the schools are in general powerless to supply a solution. The Uganda Education Commission's Report of 1963 is one of the most outspoken on this matter:

> 'Our first observation, then, is this: until there has been a substantial break-through from relatively unproductive subsistence land-use to much more intensive and profitable forms of farming in which young people can see a reward for their efforts, school leavers will continue to seek other means of employment.'
>
> (Paragraph 106)
>
> 'Hence, paradoxically, *the problems of agricultural education are not primarily educational* [their italics]; they are intimately bound up with the solution of economic, technical, and social problems over which the Ministry of Education has no control—systems of land tenure, improved land-use, finance and marketing, research and development, traditions and tribal customs, being among them.'
>
> (Paragraph 107)

But, given solutions to these non-educational problems the next question is, 'In what particular directions could the schools best help a developing rural area?' To answer this, we need to take a fresh look at what such an area might demand from its young.

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2 A fresh look at rural needs

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In a short paper such as this it is, unfortunately, necessary to generalize; but though different areas vary considerably in the stage of their development and in the relative importance of individual problems, there is sufficient similarity to make the search for principles of some profit.

One can, I think, distinguish two main kinds of educated person required by a developing rural economy, in addition to the high-level supervisory and professional staff. First, there is the group of employees in the ancillary services, some paid by government or large companies and employed in pest control, irrigation, health services, crop-grading, and market-recording, and some their own masters but involved increasingly in the modern economy and its standards, such as builders, carpenters, automobile and farm machinery repairers, and electricians. Secondly, there is the larger group of peasant farmers and their wives.

In the early stages of economic development, the first group, the ancillary services, may attract the enterprising spirits. The work often has the prestige of modernity and in many cases the security of a salary, while on those who are actually farming tradition hangs heavily, and the educated young often find family control irksome. Vocational training is outside the scope of this booklet, but general education is very much concerned not only with basic intellectual attitudes and general attainments but also with qualities of character. The task of meeting these needs in the second group, the farmers, is more taxing than in the case of the first group, partly because of sheer numbers and partly because the individual farmer needs more judgement and determination to overcome tradition. I therefore propose to ignore the

first group and consider that their needs (apart from vocational training) will be met without too much difficulty at the same time as the farmers' needs are met. As the economy develops the numbers in the first group tend to rise and in the second to drop. Farm labourers, whom I have taken not to need schooling in the early stages of development, begin to need education as modern farming methods develop. (This is not an argument for withholding education from the farm labourer, but only for getting our priorities clear.)

With a full-scale development programme in being, the primary and lower secondary schools might well be expected to contribute substantially to the achievement of the following objectives in the quality of the rural population:

1. *Incentives*—the adoption of more ambitious standards of living with sufficient realism to call forth new effort.
2. *Attitudes and habits*—(a) inquiring minds, rather than minds which too readily accept a tradition, a superstition, or even a modern authority; (b) increased foresight and a readiness to look further ahead, now that nature can be brought more under control; (c) increased accuracy and reliability, so that export crops are accurately graded and reliably cleaned; (d) initiative in adopting a method or taking some action on which others in the community are holding back; (e) readiness to work hard outside the customary times, when necessary; (f) readiness to co-operate in the new ways and with the increased efficiency demanded by more modern institutions, such as co-operatives and women's organizations.
3. *Skills*—(a) reading—e.g., labels and instructions; (b) writing—e.g., for advice, and keeping records; (c) calculating—e.g. yields, and keeping accounts; (d) handiness—for all the odd jobs around the farm.
4. *Knowledge and understanding*—(a) of change: some appreciation of the fact that the modern world is one of continuing and rapid change, that change once and for all is not enough, and that this applies to farming as much as to other activities; (b) of economics: some understanding of price movements, inflation, and the relationship of taxes to services; (c) of science: an elementary insight into scientific method, where it can and where it cannot be applied; other approaches to knowledge, old and new, especially those linked with local beliefs and problems; elementary biology; (d) of hygiene and food: modern ideas, related to what is practicable

under local conditions and not kept in a compartment of the mind separated from old ideas about food and health.

It will be seen that, apart from the learning of some elementary skills, the stress is on acquiring certain attitudes of mind and the bases for understanding and co-operating in change. Adding to the quantity of factual knowledge is not the problem, but changing the quality of thinking very much is. Moreover, these attitudes and understandings are not taught through adding to the curriculum isolated subjects such as elementary science or agriculture, but through permeating all the teaching with these ideas so that they become part of the pupil's thinking and make-up, applicable in all relevant situations.

If this analysis of rural educational needs is accepted as reasonably correct, the planner will have to be clear whether his planned development of rural education is to be aimed at achieving all or only some of these objectives. He cannot arrive at a satisfactory opinion on this unless he knows the time, the money, and the number and quality of the staff that would be required to bring about different degrees of educational change. Once he has these essential figures, he can weigh the urgency of each of these reforms against developmental demands in other sectors of the economy. In the next chapter, I shall give some indication of the scale of the efforts necessary to achieve objectives in rural education at three different levels of effectiveness.

3 Planning requirements

The base line for planning

The base from which any planning must start is the rural school as it exists, with the kind of teaching and teachers that it has. The development of a new network of schools, with a different objective, alongside the old is not possible both for financial reasons and because the task of 'selling' the new would be too great. So I shall first try to identify the features in the existing schools which are relevant to the planning of change, and then go on to discuss three degrees of change and what would be required to bring them about. The reader will, I trust, continue to bear in mind that in a booklet of this length it is impossible to avoid crude generalizations.

The school that affects the great mass of people in a rural area is essentially the primary school, though it may in some areas accept children a good deal older than the normal primary age, and may sometimes continue their education into what might be called the lower secondary level. We are not concerned in this booklet with vocational schools nor with the secondary schools proper, which, even in a progressive rural area, will for some time cater for only a small proportion of the children and will therefore be selective, focusing on the needs of children who seek to enter salaried employment.

The teacher, as was said in chapter 1, will usually have had some secondary education but will not be the cream of his generation. Nor is he very often brought into touch with progressive influences. Even if the local inspector of education (or education officer) is progressive in outlook, his visits will be infrequent. Indeed, it may be argued that unless a teacher were to be paid highly enough for him to afford

books, journals, and travel, and unless his inner resources had been developed through a long and enlightened education, it were better that he should *not* be too different from the local community. He will then be happier, will not despise that community, and will not want an immediate transfer to a town. But the fact that a teacher is sufficiently sympathetic to the local community to be prepared to stay there means that he tends to be over-influenced by the traditional outlook and is half-hearted over ideas to which the public are unsympathetic.

The kind of teaching in the school is of crucial importance. On the whole, it tends to stress learning for repetition and for examinations rather than learning for understanding and for use in varied circumstances. Syllabuses are prepared by a central authority, and the teacher, partly, from customary attitudes to authority, partly from lack of confidence, does not like to deviate much from what is suggested. Reference books for the teacher are few, and textbooks, so far as they exist, are not sufficient to offer alternative courses. Other teaching aids and practical apparatus are almost non-existent. The criterion of good learning is reproduction in the examination.

This may be an extreme picture for some places, but in essence it is true for most.

Possible objectives

Starting from this base line, the planner intent on improving the quality of a rural school system can recommend objectives of different levels of difficulty, depending on the men, money, and materials that can be made available and on the time that must elapse before the reforms become effective in the schools. To give an indication of the rate of change open to the planner, I suggest, for the type of school system described earlier in this booklet, a minimum objective, a maximum, and what appears to me to be a practical intermediate goal.

A minimum objective

In the list, on pages 22 and 23, of the desirable skills, knowledge, and qualities to nurture in a rural population, there are certain re-

quirements that could be satisfied without much change in the kind of teaching commonly found in the rural schools of developing countries. There are, for example, the simple skills that would be of value in the farmer's daily life—reading instructions, writing for advice, keeping records, calculating yields of local crops. It would not need any radical change in curriculum (which might be resented) or in the kind of teaching (which would require a major reform) to introduce into the upper classes some training in skills of this type. As a first step it would be wise to scrutinize the content of the books used by the children and the 'schemes of work' drawn up by teachers. If, as is likely these are found to have little reference to rural life and its practical activities, it should be possible, without scrapping existing books and schemes, to introduce supplementary material more closely related to the needs and interests of the community around the school.

Even to achieve these humble reforms, it is necessary to devote time and thought to the method of presenting these new materials to the teachers. With poorly educated and often untrained teachers, it is little use expecting brief notes or sketchy outlines to be effective. The material must be worked out in detail for them by educationists experienced in the work of the primary school, and they must be taken through it, step by step, in short courses. The more this supplementary material can be made specific to a locality—perhaps with the help of local development officers—the more chance there is that it will be taught with a sense of realism and not treated as an academic exercise. Even then, one cannot be certain. The teacher can, from habit or from preoccupation with the examination, fail to connect what he is teaching with anything outside the close confines of the classroom, and absurd inaccuracies in arithmetical calculations, which common sense would immediately show to be wrong, may pass unnoticed.

I have not included science and agriculture among the subjects where instruction could be markedly improved without a radical change in the methods of teaching. It is true that teachers could be trained to impart specific information on such subjects as terracing and the use of fertilizers, but there is little hope that this kind of instruction in the primary school would eventually be applied intelligently in practice. Nor have I assumed that significant advances can be made, under these conditions, in the inculcation of the 'attitudes and habits' listed on page 22. It is probable that what I have called 'increased accuracy and reliability' could be brought about in the pupils' academic work even by the present teachers, provided the authorities launched

an intensive campaign to achieve it and appointed sufficient inspectors to enforce new standards in the village schools. But such 'campaigns' in education, unsupported by more sweeping reforms, are more easy to launch than to maintain, and the results are almost certain to be confined to a few classroom skills. If habits of accuracy and reliability are to carry over to the outside world, they must be taught with more skill and more understanding than are normally at the disposal of teachers with a limited education and a year of stiff and stilted training. It is a matter of changing attitudes of mind rather than of drilling in routine habits.

It might appear that the limited measures I have suggested to achieve this minimum objective are no more than a gesture, but, where neither leadership nor money are available for more fundamental reforms, I believe that such a gesture is worth making, because it is a sign to all that the schools are not entirely divorced from local development. The resources needed to introduce these simple adaptations of teaching to local conditions are not very great. Two or three experts, employed over a year or two, could analyse the existing syllabuses and texts and, with the aid of inspectors and training college staffs, prepare supplementary materials that would enable even inadequately equipped teachers to develop in the classroom the kinds of skill I have mentioned earlier. The same people, with the same kind of assistance, could be responsible for organizing short refresher courses to train teachers in the use of the new materials.

Any reform going beyond these limited measures must involve not only a change in teaching methods, but also a change in the conception that the average teacher has of his job. For this, one needs money, time, widespread co-operation, continuity of policy and personnel, and leadership of a high quality. In the next two sections. I shall try to show why this is so.

A maximum objective

It is clear that the remainder of the requirements set out on pages 22 and 23 cannot be met by learning for repetition, but are concerned with understanding and with ways of looking at things—even if those ways be very elementary. The difficulty of establishing new outlooks permanently is often underestimated both by reformers, and by idealistic educationists who should know better. It is often suggested that

all that is necessary is a new syllabus and some improvements in teacher training. But neither syllabuses nor techniques of teaching are the most relevant points; some countries have a remarkable record of changing syllabuses without noticeable effect on the schools.

The difficulties in the way of making what is really a revolution in the kind of teaching in the schools are very considerable. In the first place, since it is a basic duty of the teacher to teach elementary skills in the three Rs and certain established factual knowledge, he resists the idea of encouraging children to find things out for themselves. It seems to him a waste of time, when he could tell them (and, of course, we have all known cases where the 'heuristic' method has been overdone). Secondly, if inquiry is encouraged, the poorly educated and ill-read teacher may find himself far too frequently unable to deal with children's questions. Thirdly, a forward-looking but realistic concern to link the simplified, clear-cut knowledge of the classroom with the complicated, changing affairs of everyday life not only is to exchange certainty for uncertainty, but seems to many to conflict with the duty of teaching the children a standard set of skills and information on which they can be examined.

The teacher who can skilfully combine the teaching of the basic skills of reading, writing and arithmetic with a stimulating, forward-looking, intellectually stringent treatment of his pupils is usually a person of considerable education. Normally he needs to have been through the kind of education in depth that is given in late adolescence and early manhood at post-school certificate level and university. Such education is expensive, not only because of its length but also because of the increased salary rates subsequently demanded by the teachers.

The achievement of maximum reform would therefore take a long time, perhaps thirty years or more, while a new generation of teachers received a much fuller education. It would also involve a great increase in expenditure to attract students of better quality to the teaching profession, and a considerable increase in well-qualified staff to man the higher classes in the additional secondary schools and the new training institutions that would be needed. As a long-term programme this is the ambition of most countries, but, as teachers are sometimes already paid salaries out of proportion to the average rural income, such a solution would appear to be impractical for the present.

An intermediate objective

Is there any half-way house, less expensive, quicker, but achieving some of the objectives? The idea that immediately occurs is to use such media as books, radio, and television to bypass the teacher and bring the more knowledgeable and understanding expert into direct contact with the pupil. By the use of mass media a small group of highly qualified teachers might be made to influence the thinking and attitudes of thousands of pupils all over a developing rural area. Is there any evidence that this approach would work?

Experience of the educational use of the newer media, radio and television, in the developing countries is still meagre and, so far, is not very encouraging, possibly because their use within a school system has often been looked on as a side-show and adopted for reasons of prestige, but also because of technical problems, both educational and physical, which arise in the less developed areas of the world.[1] The experience in the use of books and other written and illustrative material has been more seriously pursued, and in one or two countries has shown promising results. Whatever the media (and one might use a mixture of media) the educational requirements are very much the same. In the case of education at the primary school level, they can be stated as follows.

A small unit of half a dozen experts on different parts of the primary school curriculum will form the core of the movement for reform. Their task will be to prepare in detail the lessons and supplementary material for all classes in all subjects. Whatever their subject specialities they must work in the closest touch with one another, because each new idea that is introduced must appear, as far as possible, in all the subjects, in order to counteract the common habit of putting new ideas into separate compartments of the mind. Teachers' handbooks must be prepared, containing ample suggestions for experiments, investigations, and practical activities the pupils can undertake. Inspectors will need to be guided on what to look for when visiting classes, and examiners must be given suggestions on how to adapt their examination questions to the new curricula. So far, no one has managed completely to supplant the class teacher, however inadequate he

1. For the most authoritative statement on the educational use of the new media, see Schramm, W., Coombs, P. H., Kahnert, F. and Lyle, J., *The New Media: Memo to Educational Planners*, Paris, Unesco: IIEP, 1967.

may be, though apparently one country is trying to do so in effect.[1] At least at the primary school level, I doubt if they ever will. So an important task for the unit is to estimate what changes in ideas, attitudes, and teaching methods they can, in fact, demand of the majority of teachers with any hope of success. Then the new courses and materials must be aimed at achieving this degree of change. To match courses and teaching materials in this way to the abilities of the teachers, the unit will require experimental facilities, preferably in a school or schools under its control but staffed with ordinary teachers. They will need to consult at every stage with experienced teachers, inspectors, and the staffs of training colleges, who will later be involved, with them, in training the rank and file of the profession in the new approaches and techniques. For quite an extended period the experts will have to visit a wide variety of schools to check the progress of the scheme, and to make the inevitable amendments to courses and materials that experience will show to be necessary.

Such a programme of revolutionary changes in school practice is not to be undertaken lightly. Perhaps the best way of giving the planner at least a rough indication of the time and money that will be involved in applying this intermediate method of reform to rural schools is to show some of the problems that will be met in dealing with the expert staff, with the teachers, and with public relations generally.

Expert staff with sufficient background are difficult to find among the primary teachers, and therefore local or foreign staff with experience in secondary or higher education have to be employed, preferably in association with selected primary teachers. The significance of this for planning is that time must be allowed for the experts to get to know children of this age. This they can do through experimental classes, but it is a time-consuming process. Production is also slowed down by the need to follow through an experimental class as it moves up the school. One cannot build ahead of the foundations, and so must think of the project as lasting a decade or more.

If there are frequent changes of experts, the courses on which they are working will change with them, for few experts are happy at taking over someone else's baby. In that case the courses will never be firm and consistent enough to give the teachers the support and guid-

1. See Beeby, C. E. *The Quality of Education in Developing Countries*. Cambridge, Harvard University Press, 1966, p. 96.

ance they so sorely need. So the expert staff must be made to feel that they have the confidence of the authorities, and that the whole scheme is not dependent on the passing whim of one or two people in high places. Terms of secondment, and also foreign contracts where foreign help is needed, must be for quite long periods, and provision must be made for promotion within the scheme, so that experts are not moved out in the middle of their work just to get the promotion for which they are due.

The teachers in the classroom cannot act purely as monitors. The more stimulating the material, the more 'come-back' from the pupils. If this response is not dealt with sympathetically and knowledgeably, the brighter pupils will be frustrated and much of the value of the project will be lost. The teacher on the spot has to comment on the children's work, correct it, encourage and admonish, and cope with what, it is hoped, will be numerous questions. The experts can help by giving the teacher supplementary information and notes on the various exercises and the problems likely to arise. They can also try to avoid rousing curiosity which they do not in some measure help the teacher to satisfy. But the success of this effort to change learning from passive, unthinking absorption to an active, thoughtful process depends greatly on the class teacher's active co-operation. His sympathy must be won and his morale maintained. If they are not (and inevitably there will be a proportion of teachers who cannot, or will not, respond to such leadership) there is likely to be a widespread misuse of the new materials and a reversion to mechanical learning. It follows that any plan of this type will fail if it does not make provision for experimental facilities for the experts, for a full programme of in-service courses, and for as much personal contact as possible between experts and teachers.

Relationships with other educational staff, with development officers, and with the general public are important, because the changes will not come about if there is misunderstanding and hostility. In most developing countries the content of the curriculum is fixed by a central educational authority, and school inspectors and the system of public examinations determine very largely what it is in the programme of the schools that the teachers regard as most worthy of their attention. Hence the need at every stage for conferences of inspectors, examiners, training college staffs, and head teachers, where their advice can be

sought and where methods of relating the new aims to the existing examination system can be worked out.

Another group who must be brought into consultation are the local development officers, not only because they may contribute useful ideas to the curriculum, but also because, unless they appreciate the change in attitude that is being attempted, they may well be critical of the first products of the reformed schools. This is particularly likely where development officers are accustomed to having their views accepted by local people and are unused to being asked 'Why?'.

The general public, no less than the officials, must be made aware of the changes that are taking place in the schools, and of the reasons for them. Parents, as elsewhere in the world, are concerned with success in examinations. They are likely to be suspicious of change, particularly when it involves their children spending time in doing scientific experiments, making things, drawing, and visiting and inquiring into local institutions—all of which, they may think, takes up time better spent on getting on with their reading, writing and arithmetic. They may be partly reassured if the experts can first show that their methods produce better examination results in traditional subjects. It may also be advisable not to stress the word 'rural' but to use some such term as 'developmental' to describe the new objectives. The progressive forward-looking elements of the public, impatient for reform but not realizing the difficulties, may suspect that the experts are spending too much time on experimenting and the testing of their material. Some assume that all one has to do is to adopt a 'good' syllabus from another country; others think that though local adaptation is necessary, particularly at the elementary level of education, the experts are aiming at perfection when what the country needs is an immediate improvement.

The significance of all this for planning is that there must be sufficient expert staff to cope with public relations, and that it must have the right leadership. The initial presentation of the plan to the public must be very carefully thought out and their minds prepared for it well before it is introduced on a major scale into the schools.

Finally, there is the problem of ensuring the carry-over of the changed habits and outlook into life, when the child leaves school. In a society in which tradition and the authority of older people carry great weight, the young tend to do one of two things after leaving school; either they relapse into traditional ways and conform, or they make a complete break, and, more often than not, leave the dis-

trict. Every effort must be made to create in the village conditions more favourable to the attitudes inculcated by the school. Some provision for the guidance and support of children who have recently left school will be essential. This may take the form of 4H and young farmers' clubs, of radio programmes and of a youth magazine. Local conditions will determine how such help to the young may best be given, but, without it, the new programme in the schools may be largely wasted.

Summary. A plan with this intermediate objective will take a considerable time to have an effect, much more than the two or three years needed for the minimum plan, but much less than having to wait for a new generation of better-educated teachers to mature and take over. One should think in terms of a decade or more.

The costs of the intermediate plan will be by no means insignificant. They must cover the employment of a group of experts, the publishing of textbooks and teachers' guides, broadcasting, in-service courses for teachers, conferences of inspectors, examiners, and head teachers, publicity, and follow-up measures to support ex-pupils. Some of these services will probably exist already and can be put to new uses. Fortunately, this kind of plan does not involve large, all-round increases in the salary scales of teachers or the considerable costs of giving them a much longer basic education. At the same time, there is unlikely to be any reduction in teaching staff.

The plan requires only a small group of highly expert staff, but their quality, the continuity of their service, and the inspiration of their leadership will be crucial.

The effects of the plan are likely to be patchy, but at least some children will catch the new way of looking at things and most teachers will gain a new sense of purpose. But it is essential to regard this as a transitional stage, and not as the final goal of school reform. In the long run, nothing will guarantee work of high quality in the schools, be they rural or urban, without a teaching service that is well educated and well trained.

This treatment of a plan to achieve an intermediate objective has necessarily been generalized and somewhat abstract. In the appendix will be found a brief account of an actual attempt to apply such a plan in a developing country

An intermediate plan

What follows is an example of an intermediate stage project in which I took a part over a period of sixteen years—long enough to see the project through its period of novelty and for the more permanent effects to become evident. The area was the northern Sudan, and the project was developed because the State's Elementary Teacher-training College found that improved training was not in itself sufficient to achieve a change from learning for repetition to learning for adaptable use. The teachers had themselves received the repetitive kind of education, and it was not financially feasible to give them the considerable amount of general education needed to turn them into professional teachers (the maximum objective). The media used were books and graphic illustrations; at that time (1934) there were no radio or television facilities.

The project was not confined to rural schools, but, as the area was mainly rural, we very much hoped the reforms would develop a positive attitude in the young towards rural life. In this we failed, and only gradually and by the hard way of experience did we come to the same conclusions as those in the Uganda Education Commission Report (our page 20), namely that school education must be ancillary to rural change and cannot pioneer it. However, our experience is relevant to the topic of this booklet, because it had considerable success in changing many pupils' attitudes towards learning and in giving a new sense of purpose to teachers.

Work on the curriculum started as a sideline of the teacher-training college. It began during the financial crisis of the 1930s, and so we were forced to start in a very small way, taking bits of the curriculum at a time, with only three or four subject specialists devoting part of

their time to the work. This was fortunate, because we were feeling our way and, when we began, had no real conception of the magnitude of what we had undertaken.

Expert staff. The subject specialists learnt on the job through their experimental classes in the elementary school attached to the training college. Foreigners were usually paired with local teachers, each pair being responsible for one, or at the most, two, subjects. Their ordinary teaching load in the college was reduced by a third to enable them to undertake this task. We did not aim at perfection but at courses which would be within the capacity of the ordinary elementary teacher after he had had some special training in their use, which would not require much apparatus, and which would mean something real to the pupils. You could tell if you had achieved this by a marked change in the atmosphere of a class. We found that, if we allowed the expert staff plenty of time for their ideas to mature, and for experiment, discussion, and revision, and did not demand that their first drafts be published, the courses they produced met these criteria.

At first we entirely misjudged the length of time required, mainly because it was not realized how much experience of young children and their traditional background was needed by specialists most of whose experience had been with older children in other countries. It soon became obvious that, in important ways, children had been understretched at school. Also, we did not realize the dearth of local material available in a form suitable for children, and it took a long time to collect. For example, we spent a considerable amount of time over a period of three years choosing, making contact with, and interviewing nine families in different parts of the country. The object of the exercise was to illustrate in a vivid human way the various local ways of living. Six of the families lived in a traditional way, three illustrated modern changes. This case was rather exceptional, but we found that it usually took two years to produce a one-year course, though we could go faster towards the end of a series. The complete revision of the primary course took about sixteen years. This could, perhaps, have been cut to ten with a more vigorous start. Over 120 books and booklets were produced, and the project made use of over sixty teachers and others, in addition to the specialists, in experimenting, writing, translating, and illustrating.

As the new books for teachers (and some for the children) became available from the press, batches of teachers were brought to the

college for two-month courses. This may seem a long time, but we did not aim merely at instructing them in how to use the books; we wanted to get real, and not just placatory, agreement, and to involve them personally in the process of reform. As far as possible we tried to prevent schools from using our books before any member of the staff had been trained in their use. Courses were held throughout the school year, and schools which had a teacher absent on a course went on to a modified time-table. They did not get a replacement. The value of the new lessons was accepted as more than compensation for any loss the children might have suffered through one teacher being away.

Costs. The Government bore the costs of publication, since the number of copies required was usually too small to attract commercial publishers. No royalties were paid, because work was done in official time, and it was thought wise to avoid creating vested personal interests in the books. The extra expenditure caused through freeing staff to spend part of their time on the project was estimated to add about 5 per cent to the annual cost of each child in school. It would have been smaller had the number of children in school at that time not been so low. There were, of course, other costs to the Government for in-service courses for teachers and for the measures taken to follow up the pupils when they left school.

Relationships. The relations developed with teachers and education officers were good. Factors making for this were: the changes began with improvements in the traditional subjects (language and arithmetic) rather than with new subjects, or subject-content, with which the teachers were not familiar; headmasters and the older teachers were the first to be invited for consultation and for training courses; part of the annual conference of education officers was held at the project headquarters; a guide to the inspection of the new courses was prepared; and education officers were relieved of some of the burden of subject inspection. The fact that ours was a government college assured teachers that the reforms had official approval, and this was reinforced when the principal, without changing his post, was given the rank of assistant director. Perhaps the most important thing making for good relations was that there was unusual continuity of staffing, some of the senior staff spending from eight to twelve years at the project centre.

Through the training college's experimental work with adult edu-

cation, we became involved in rural development schemes, and so made useful contact with certain individuals, but the idea of integrating school education into any of these schemes was never really contemplated. Moreover, most of the development schemes were authoritative in character, and their success was judged by immediate economic improvement, rather than by the number of inquiring minds they produced.

With the general public our relations were poor, and most people were ignorant of our objectives. The educated Sudanese were suspicious that the changes, particularly any with a suggestion of local objectives, were designed to stem the tide of modern progress. On the other hand, those who did appreciate the aims of the plan thought we were too slow in producing results. At that particular period, conditions were such that these poor relationships did not seriously affect our progress, and the obvious success of the project eventually set things right, but, in other circumstances, such lack of understanding by the public could defeat a plan at the outset.

Follow-up. The measures taken to follow up the children when they left school were good in themselves but inadequate in quantity. They took the form of boys' clubs and a very popular youth magazine subsidized by the Government.

A fair concluding comment would be that, while the plan brought about marked, and sometimes revolutionary, changes in the learning in most schools, it was not sufficiently realized by everyone that the initial impact would fade unless there was a succession of new material and new ideas coming into the schools, and unless the teachers themselves were reaching a new professional level. There was too strong a tendency to think that, having changed once, all one had to do was mechanically repeat last year's lessons. My own view is that the intermediate plan must progressively slide into the maximum plan, that it cannot stay still. The first step may be to offer teachers a single unvarying course for use in the primary schools, but, as they gain confidence with this, they must be given alternative courses and materials and encouraged to use their own judgement in deciding between them. Then, by degrees, one should enrich the material until the teachers, by this time much better educated, can exercise an intelligent and informed choice of methods and materials to suit the particular children in their care.

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Suggestions for further reading

There have been a number of studies of the reaction of rural people to attempts to improve their economic condition. One of the most readable s by an Indian woman journalist who spent a year travelling through villages in all parts of India, recording the varied comments of the people on development schemes, including some for education:

NAIR, K. *Blossoms in the dust*. London, Gerald Duckworth, 1961.

Opposing views on the feasibility of deliberately using the schools to bring about specific social and economic changes are exemplified in two papers by Thomas Balogh and Philip J. Foster respectively. Extracts from these papers will be found in:

HANSON, J. W.; BREMBACH, C. S. *Education and the development of nations*. New York, Holt, Rinehart and Winston, 1966, pp. 160–174.

Reports of two inquiries into the effects of agriculture and rural studies in schools in Ghana and Tanganyika can be found in:

CHAPLIN, B. H. G. 'School attitudes to agriculture', in *West African journal of education*, Vol V, No. 3, Oct. 1961.

TANGANYIKA DEPARTMENT OF AGRICULTURE. *Report of an enquiry into agricultural education at primary and middle schools*. 1956.

A fuller account of the 'intermediate' project sketched in the appendix of this booklet is given in:

GRIFFITHS, V. L. *An experiment in education*. London, Longmans Green, 1953.

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